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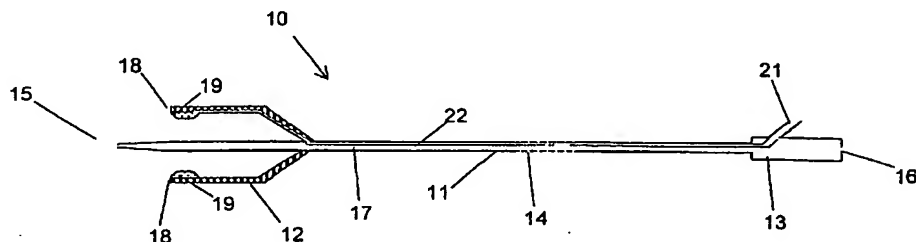
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(54) Title: RETRIEVAL DEVICE



(57) Abstract: A device (10) for retrieval of a foreign body, such as an undeployed stent (33) from a vessel (30) of a patient, has a central shaft (11) for receiving a guidewire (32) therein. A balloon support means (12) extends from the central shaft (11) and has a free end (18) carrying an inflatable balloon means (19). The inflatable balloon means (19) is arranged to expand inwardly towards the central shaft (11) on inflation, so as in use to bear against the outer circumference of the stent (33) and hold the stent (33) against the central shaft (11). The combined stent (33) and device (10) can then be withdrawn from the vessel (30).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61F A61B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 868 753 A (SCHATZ RICHARD A) 9 February 1999 (1999-02-09) column 4, line 10 - line 65; figures 5,10	1-15
X	US 6 027 509 A (REN BROOKE O ET AL) 22 February 2000 (2000-02-22) column 4, line 40 - column 5, line 40; figure 2	1-3
A	EP 0 364 420 A (MEDINVENT SA) 18 April 1990 (1990-04-18) abstract; figures	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5868753	A	09-02-1999	WO	9717914 A1	22-05-1997
			US	5785715 A	28-07-1998
			US	6027509 A	22-02-2000
US 6027509	A	22-02-2000	WO	9717914 A1	22-05-1997
			US	5868753 A	09-02-1999
			US	5785715 A	28-07-1998
EP 0364420	A	18-04-1990	AT	82145 T	15-11-1992
			DE	68903466 D1	17-12-1992
			DE	68903466 T2	03-06-1993
			EP	0364420 A1	18-04-1990
			ES	2035645 T3	16-04-1993
			JP	2189145 A	25-07-1990
			JP	2858461 B2	17-02-1999
			US	4990151 A	05-02-1991